

ASME Y14.38-2019

[Revision of ASME Y14.38-2007 (R2013)]

Abbreviations and Acronyms for Use in Product Definition and Related Documents

**Engineering Product Definition and
Related Documentation Practices**

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

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**The American Society of
Mechanical Engineers**

Two Park Avenue • New York, NY • 10016 USA

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FOREWORD

Subcommittee 38, Abbreviations, was formed in May 1995 as a Subcommittee of the ASME Standards Committee Y14, Engineering Product Definition and Related Documentation Practices. The Subcommittee is charged with the responsibility of compiling and maintaining a list of abbreviations and acronyms for use on engineering drawings and related documents.

ASME Y1.1 was revised and redesignated as ASME Y14.38. This Standard is based on ASME Y1.1 and MIL-STD-12.

This revision incorporates the ASME Y14.38-2007 addenda and comments received since the release of the ASME Y14.38-2007 edition. No abbreviations or acronyms were eliminated; additional abbreviations were added from model-based initiatives and various Y14 standards that list abbreviations. The lists of periodic elements and of engineering societies and industrial associations were updated. The text was also updated to reflect the current standard content and formatting for Y14 standards.

The successful completion of this Standard is attributed to the subcommittee members, contributing guests, and the departments and agencies of the U.S. Government.

This Standard was approved by the American National Standards Institute on November 15, 2019.

ASME Y14 STANDARDS COMMITTEE

Engineering Product Definition and Related Documentation Practices

(The following is the roster of the Committee at the time of approval of this Standard.)

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Secretary, Y14 Standards Committee
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Two Park Avenue
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Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued to provide alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Attending Committee Meetings. The Y14 Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the Y14 Standards Committee. Future Committee meeting dates and locations can be found on the Committee Page at <http://go.asme.org/Y14committee>.

ABBREVIATIONS AND ACRONYMS FOR USE IN PRODUCT DEFINITION AND RELATED DOCUMENTS

1 SCOPE AND PURPOSE

1.1 Scope

The abbreviations and acronyms, hereinafter referred to as “abbreviations,” listed in this Standard are used on engineering drawings and related documentation.

1.2 Purpose

The intent of this Standard is to allow the use of approved abbreviations in lieu of the use of complete words or terminology. Abbreviations defined by this Standard need not be additionally defined by the using drawing or related document. It is not the intent of this Standard to include abbreviations defined or established in other standards such as those for scientific terms and notations. However, an exception is made for those abbreviations that have widespread use and recognition, for example, AM for amplitude modulation, and FM for frequency modulation (radio).

1.3 ASME Y14 Series Conventions

The conventions in [paras. 1.3.1](#) through [1.3.10](#) are used in this and other ASME Y14 standards.

1.3.1 Mandatory, Nonmandatory, Guidance, and Optional Words

- (a) The word “shall” establishes a requirement.
- (b) The word “will” establishes a declaration of purpose on the part of the design activity.
- (c) The word “should” establishes a recommended practice.
- (d) The word “may” establishes an allowed practice.
- (e) The words “typical,” “example,” and “for reference” and the Latin abbreviation “e.g.” indicate suggestions given for guidance only.
- (f) The word “or” used in conjunction with a requirement or a recommended practice indicates that there are two or more options for complying with the stated requirement or practice.
- (g) The phrase “unless otherwise specified” or “UOS” shall be used to indicate a default requirement. The phrase is used when the default is a generally applied requirement and an exception may be provided by another document or requirement.

1.3.2 Cross-Reference of Standards. Cross-reference of standards in text with or without a date following the standard designator shall be interpreted as follows:

(a) Reference to other ASME Y14 Standards in the text without a date following the standard designator indicates the issue of the standard identified in the References section ([para. 1.3.9](#) and [section 2](#)) shall be used to meet the requirement.

(b) Reference to other ASME Y14 Standards in the text with a date following the standard designator indicates that only that issue of the standard shall be used to meet the requirement.

1.3.3 Invocation of Referenced Standards. The following examples define the invocation of a standard when specified in the References section ([para. 1.3.9](#) and [section 2](#)) and referenced in the text of the Y14 Standard:

(a) When a referenced standard is cited in the text with no limitations to a specific subject or paragraph(s) of the standard, the entire standard is invoked. For example, “dimensioning and tolerancing shall be in accordance with ASME Y14.5” is invoking the complete standard because the subject of the standard is dimensioning and tolerancing, and no specific subject or paragraph within the standard is invoked.

(b) When a referenced standard is cited in the text with limitations to a specific subject or paragraph(s) of the standard, only the paragraph(s) on that subject is invoked. For example, “assign part or identifying numbers in accordance with ASME Y14.100” is invoking only the paragraph(s) on part or identifying numbers because the subject of the standard is engineering drawing practices and part or identifying numbers is a specific subject within the standard.

(c) When a referenced standard is cited in the text without an invoking statement such as “in accordance with,” the standard is invoked for guidance only. For example, “for gaging principles, see ASME Y14.43” is only for guidance and no portion of the standard is invoked.

1.3.4 Parentheses Following a Definition. When a definition is followed by a standard referenced in parentheses, the standard referenced in parentheses is the source for the definition.